

## **CONYZA FLORIBUNDA (ASTERACEAE) NEW TO THE FLORA OF TEXAS**

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### **ABSTRACT**

*Conyza floribunda* (*Erigeron sumatrensis*) is documented as naturalizing in Texas. Several colonies were found growing in a coastal live oak woodland in Chambers County. The species has moderate invasive potential along the Texas coast.

**KEY WORDS:** Asteraceae, *Conyza*, *Erigeron sumatrensis*, Texas, salt dome, chênrière, naturalized

*Conyza floribunda* Kunth in H.B.K., commonly known as asthmaweed, was recently documented as naturalizing in Chambers County, Texas. The species has not previously been reported in Texas (Correll & Johnson 1970; Hatch et al. 1990; Jones et al. 1997; Turner et al. 2003). The species is thought to be native to South America (Strother 2006) and has been introduced into the United States in Alabama, California, Georgia, and Mississippi (USDA NRCS 2013) and Florida (Strother 2006), as well as Mexico, Central America, Europe, Asia, and Africa (Strother 2006).

*Conyza floribunda* (Figs. 1, 2) was found growing in shaded gaps in the understory of a chênrière (a coastal woodland) in Chambers County. More than a dozen colonies, each averaging about 0.2 meters square, were observed at this site and immature seedlings were observed. Plants are annual and individuals have one to multiple stems from a single basal rosette. The species is further characterized by its erect habit, pistillate florets numbering 2–45+, strigose phyllaries, and pale tan cypselae with some in each head with reddish nerves.

Voucher: USA. Texas. Chambers Co.: Boy Scout Woods (Louis B. Smith Bird Sanctuary Preserve), 0.2 mi E of the junction of Texas Hwy 124 and 5th Street, High Island, 2 Jan 2013, *Singhurst 19326* (BAYLU).

Coastal live oak (*Quercus virginiana*) dominated woodlands in Texas are located in the middle and upper Gulf coast. The woodland at Boy Scout Woods Preserve (also known as Louis B. Smith Bird Sanctuary) occurs on High Island, which is the surface expression of a salt dome at the edge of the Gulf of Mexico (Houston Audubon Sanctuaries 2013). A thick layer of ancient salt, about 9150 m below the surface, exists throughout coastal southeast Texas. At some locations (High Island an example) a column of salt was squeezed upward toward the surface, producing a "dome" (locally known as an "island") at the surface. The High Island dome is about 1.6 km in diameter and is elevated 9.7 m above the surrounding marshes, thus providing conditions favorable to trees and shrubs, in this case a chênrière. It forms a unique and important "island" of habitat for migrating birds.



Figure 1. *Conyza floribunda* at High Island in Chambers County, Texas. Photo by Singhurst.



Fig. 2. *Conyza floribunda* showing basal rosettes and maturing stems bolting into flower. Photo by Singhurst.

The Boy Scout Woods Preserve woodland is dominated by *Quercus virginiana*, *Q. nigra*, *Prunus caroliniana*, and *Celtis laevigata*. Other important trees include *Acer rubrum*, *Carya illinoensis*, *Gleditsia triacanthos*, *Magnolia grandiflora*, *Morus rubra*, *Persea borbonia*, *Quercus pagoda*, *Triadica sebifera*, and *Ulmus americana*. Understory shrubs include *Cornus drummondii*, *Erythrina herbacea*, *Ilex vomitoria*, *Ligustrum sinense*, *Malvaviscus drummondii*, and *Sabal minor*. Prominent herbaceous flora consists of *Andropogon glomeratus*, *Carex cherokeensis*, *Chasmanthium latifolium*, *Oplismenus hirtellus*, and *Verbesina virginica*.

Strother (2006) included four species of *Conyza* in his treatment of the genus in the Flora of North America, with three species (*C. bonariensis* (L.) Cronq., *C. canadensis* (L.) Cronq., and *C. ramosissima* Cronq.) cited as present in Texas. He noted that *Conyza* is evolutionary nested within *Erigeron*, arising independently from several different ancestral loci within the genus. As a species of *Erigeron*, the correct name for the species is *E. sumatrensis* Retz (as treated in Calflora 2013). We have used the name in *Conyza* following the Flora of North America treatment.

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